



مشخصات کلی

نام: امین

نام خانوادگی: فرخ آبادی

سال تولد: ۱۳۵۷

آدرس: تهران - جلال آل احمد، پل نصر، دانشگاه تربیت مدرس، دانشکده مهندسی مکانیک، اتاق ۴۱۰.

تلفن تماس: ۰۲۱-۸۲۸۸۳۹۳۸

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سوابق تحصیلی

- کارشناسی: رشته مهندسی مکانیک - طراحی جامدات از دانشگاه فردوسی مشهد (۱۳۸۰).
- کارشناسی ارشد: رشته مهندسی هوافضا - سازه‌های هوایی از دانشگاه صنعتی شریف تهران (۱۳۸۲).
- دکتری: رشته مهندسی هوافضا - سازه‌های هوایی در دانشگاه صنعتی امیرکبیر (۱۳۸۹).

عنوان پایان نامه

۱. بهینه‌سازی و تحلیل مقطع تیر یکسرگردار برای کمترین جابجایی به روش حساب تغییرات بعنوان پروژه کارشناسی.
۲. بررسی و مدل‌سازی رشد تورق (DELAMINATION GROWTH) در مواد مرکب لایه‌ای تحت بار فشاری و برشی داخل صفحه بعنوان پروژه کارشناسی ارشد.
۳. مطالعه و بررسی مکانیزمهای خرابی (ترک عرضی و جداسازی بین لایه‌ای) در مواد مرکب لایه‌ای با تلفیق دیدگاه میکرو-مزو در چارچوب مکانیک خرابی محیطهای پیوسته بعنوان رساله دکتری.

زمینه های تحقیقاتی

۱. مکانیک مواد مرکب و مودهای خرابی در مواد مرکب شامل مطالعه و تحلیل ترک‌های عرضی درون لایه‌ای در مواد مرکب لایه‌ای، مطالعه ترک‌های بین لایه‌ای، بررسی و تحلیل ضربه سرعت پایین بر مواد مرکب لایه‌ای.
۲. مطالعه رفتار کمانش و پس کمانش در مواد مرکب لایه‌ای تحت بارهای فشاری و بررسی رشد جداسازی بین لایه‌ای در این مواد
۳. مکانیک خرابی محیطهای پیوسته و تحلیل المان محدود غیرخطی سازه‌های مواد مرکب
۴. تحلیل ترموالاستیسیته مواد
۵. طراحی اجزا، طراحی سازه و سیستمهای مکانیکی.

مقالات کنفرانس

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۲. بررسی و مدلسازی رشد تورق در مواد مرکب لایه‌ای تحت بار برشی داخل صفحه. / محمدعلی کوچک‌زاده، امین فرخ‌آبادی، نهمین کنفرانس سراسری مهندسی مکانیک، اردیبهشت ۱۳۸۳.
۳. پیش‌بینی کاهش سختی در چندلایه‌های متقارن متعامد حاوی ترک‌های درون‌لایه‌ای عرضی، حسین حسینی تودشکی، امین فرخ‌آبادی، بیژن محمدی، هفتمین همایش سالانه (بین‌المللی) انجمن هوا فضای ایران، تهران، دانشگاه صنعتی شریف، ۳۰ بهمن - ۲ اسفند ۱۳۸۶
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14. Investigation of matrix cracking formation in composite laminates under the bending loading, **Farrokhhabadi, A.**, Bahrami, M., The Biennial International Conference on Experimental Solid Mechanics (Xmech 2018), Tehran.
۱۵. بررسی اثرات ترک ماتریسی و جدایشگی بین‌لایه‌ای در خواص خمشی مواد مرکب لایه‌ای متعامد، امین فرخ‌آبادی، محمد بهرامی، ISME 2018، سمنان.

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مهارتها و تسلط بر نرم افزارها

۱. تسلط به زبان برنامه‌نویسی ++C، Visual Fortran.

۲. تسلط به کار و برنامه‌نویسی در نرم‌افزارهای MATLAB, MAPLE.
۳. تسلط بر نرم‌افزارهای تحلیلی شامل ANSYS, LS-DYNA, ANSYS Workbench و
CATIA.
۴. تسلط بر نرم‌افزارهای مدل‌سازی شامل Solid Works و **CATIA**.